BS 5467 Sectoral Shaped Copper Conductor Multi Core SWA 1.9/3.3kV Cable

Eland Product Group: B9S

APPLICATION
Power and auxiliary control cables for use in power networks, underground in free-draining soil, outdoor and indoor applications and for use in cable ducting.

CHARACTERISTICS

Voltage Rating Uo/U
1.9/3.3kV

Temperature Rating
Maximum Operating: +90°C
Maximum Short-Circuit: +250°C

Minimum Bending Radius
12 x overall diameter

CONSTRUCTION

Conductor
Class 2 sectoral shaped stranded copper

Insulation
XLPE (Cross-Linked Polyethylene)

Separator
Polyester Tape

Filler
PVC (Polyvinyl Chloride)

Armour
SWA (Galvanised steel wire armour)

Outer Sheath
PVC (Polyvinyl Chloride)

Core Identification
● Brown ● Black ● Grey

Sheath Colour
● Black

STANDARDS

BS 5467, IEC 60502-1

Flame retardant according to IEC 60332-1

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.

REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.
## DIMENSIONS

<table>
<thead>
<tr>
<th>ELAND PART NO.</th>
<th>NO. OF CORES</th>
<th>NOMINAL CROSS SECTIONAL AREA (\text{mm}^2)</th>
<th>NOMINAL THICKNESS OF INSULATION (\text{mm})</th>
<th>MINIMUM THICKNESS OF OUTER SHEATH (\text{mm})</th>
<th>NOMINAL OUTER DIAMETER (\text{mm})</th>
<th>NOMINAL WEIGHT (\text{kg/km})</th>
</tr>
</thead>
<tbody>
<tr>
<td>B9S0335SBK</td>
<td>3</td>
<td>35</td>
<td>2.0</td>
<td>1.32</td>
<td>28</td>
<td>2124</td>
</tr>
<tr>
<td>B9S0350SBK</td>
<td>3</td>
<td>50</td>
<td>2.0</td>
<td>1.40</td>
<td>33</td>
<td>2930</td>
</tr>
<tr>
<td>B9S0370SBK</td>
<td>3</td>
<td>70</td>
<td>2.0</td>
<td>1.48</td>
<td>36</td>
<td>3739</td>
</tr>
<tr>
<td>B9S0395SBK</td>
<td>3</td>
<td>95</td>
<td>2.0</td>
<td>1.56</td>
<td>40</td>
<td>4734</td>
</tr>
<tr>
<td>B9S03120SBK</td>
<td>3</td>
<td>120</td>
<td>2.0</td>
<td>1.64</td>
<td>44</td>
<td>6047</td>
</tr>
<tr>
<td>B9S03150SBK</td>
<td>3</td>
<td>150</td>
<td>2.0</td>
<td>1.72</td>
<td>48</td>
<td>7196</td>
</tr>
<tr>
<td>B9S03185SBK</td>
<td>3</td>
<td>185</td>
<td>2.0</td>
<td>1.80</td>
<td>51</td>
<td>8565</td>
</tr>
<tr>
<td>B9S03240SBK</td>
<td>3</td>
<td>240</td>
<td>2.0</td>
<td>1.88</td>
<td>57</td>
<td>10645</td>
</tr>
<tr>
<td>B9S03300SBK</td>
<td>3</td>
<td>300</td>
<td>2.0</td>
<td>1.96</td>
<td>62</td>
<td>12709</td>
</tr>
</tbody>
</table>

## ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>NOMINAL CROSS SECTIONAL AREA (\text{mm}^2)</th>
<th>CURRENT CARRYING CAPACITY (A)</th>
<th>MAXIMUM CONDUCTOR DC RESISTANCE AT (20^\circ) (\Omega/\text{km})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clipped direct</td>
<td>In free air or on a perforated cable tray, etc., horizontal or vertical at (30^\circ) (\Omega/\text{km})</td>
<td></td>
</tr>
<tr>
<td>Direct in ground or in ducting in ground, in or around buildings at (20^\circ) (\Omega/\text{km})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 three or 1 four core cable, three-phase a.c or d.c</td>
<td>1 three or 1 four core cable, three-phase a.c or d.c</td>
<td>1 three or 1 four core cable, three-phase a.c or d.c</td>
</tr>
</tbody>
</table>

| 35                           | 154 | 162 | 115       | 0.524 |
| 50                           | 187 | 197 | 135       | 0.387 |
| 70                           | 238 | 251 | 167       | 0.268 |
| 95                           | 289 | 304 | 197       | 0.193 |
| 120                          | 335 | 353 | 223       | 0.153 |
| 150                          | 386 | 406 | 251       | 0.124 |
| 185                          | 441 | 463 | 281       | 0.0991|
| 240                          | 520 | 546 | 324       | 0.0754|
| 300                          | 599 | 628 | 365       | 0.0601|

Air ambient temperature: \(30^\circ\) \(\text{C}\)
Ground ambient temperature: \(20^\circ\) \(\text{C}\)
Conductor operating temperature: \(90^\circ\) \(\text{C}\)

Notes
1. Where a conductor operates at a temperature exceeding \(70^\circ\) \(\text{C}\) it must be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see Regulation 512.1.2 of the 18th Edition of IEE Wiring Regulations).
2. Where cables in this table are connected to equipment or accessories designed to operate at a temperature not exceeding \(70^\circ\) \(\text{C}\), the current ratings given in the equivalent table for \(70^\circ\) \(\text{C}\) thermoplastic insulated cables (Table 4D4A) must be used (see also Regulation 523.1 of the 18th Edition of IEE Wiring Regulations).

The above table is in accordance with Table 4E4A of the 18th Edition of IEE Wiring Regulations

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.